

Title (en)

METHOD FOR OPERATING A POWER PLANT

Title (de)

VERFAHREN ZUM BETRIEB EINES KRAFTWERKS

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UNE CENTRALE ÉLECTRIQUE

Publication

EP 3133268 A1 20170222 (EN)

Application

EP 15182049 A 20150821

Priority

EP 15182049 A 20150821

Abstract (en)

Method for operating a power plant, comprising providing a power target setpoint (200) to a power plant controller (100), dependent on said power target setpoint (200), determining a setpoint of at least one first power plant operation parameter, operating the power plant at a set power output and with said first operation parameter adjusted to the setpoint of said operation parameter, applying a measurement to determine an actual value of at least one second operation parameter, applying a theoretical power plant model (501) to determine an expected value of said second operation parameter, comparing the expected value and the measured value of the second operation parameter, applying a calibration loop for the theoretical power plant model (501), said calibration loop comprising: applying a comparison step to determine a deviation between the expected value and the measured value of the second operation parameter, modifying the theoretical power plant model, re-calculating the expected value of the second operation parameter, repeating the calibration loop until a best match between the expected value and the measured value of the second operation parameter is achieved, thus obtaining a calibrated power plant model (501, 502) after terminating the calibration loop.

IPC 8 full level

F02C 9/00 (2006.01); **F01K 13/02** (2006.01)

CPC (source: CN EP US)

F01K 13/02 (2013.01 - EP US); **F01K 23/101** (2013.01 - EP US); **F02C 9/00** (2013.01 - EP US); **F02C 9/20** (2013.01 - US);
G05B 13/026 (2013.01 - US); **G05B 17/02** (2013.01 - CN); **F05D 2260/81** (2013.01 - EP US); **F05D 2260/821** (2013.01 - EP US);
F05D 2270/11 (2013.01 - US); **F05D 2270/20** (2013.01 - US); **Y02E 20/16** (2013.01 - EP US)

Citation (applicant)

- EP 2071157 A1 20090617 - ALSTOM TECHNOLOGY LTD [CH]
- EP 2657468 A2 20131030 - GEN ELECTRIC [US]

Citation (search report)

- [X] US 2015184549 A1 20150702 - PAMUJULA SURESH [US], et al
- [XD] EP 2657468 A2 20131030 - GEN ELECTRIC [US]

Cited by

EP3708790A3; CN110785542A; CN113919518A; WO2018233961A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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US 2017051681 A1 20170223

DOCDB simple family (application)

EP 15182049 A 20150821; CN 201610898317 A 20160819; JP 2016161369 A 20160819; US 201615241269 A 20160819